Agency 461

# **Department of Ecology**

# **Recommendation Summary**

| Dollars in Thousands                                 |                                |         |             |             |
|--|--------------------------------|---------|-------------|-------------|
|  | Annual FTEs General Fund State |         | Other Funds | Total Funds |
| 2013-15 Expenditure Authority                        | 1,580.8                        | 51,007  | 408,646     | 459,653     |
| Total Maintenance Level                              | 1,580.5                        | 59,731  | 401,683     | 461,414     |
| Difference   | (.4)                           | 8,724   | (6,963)     | 1,761       |
| Percent Change from Current Biennium                 | 0.0%                           | 17.1%   | (1.7)%      | 0.4%        |
| Performance Changes                                  |                                |         |             |             |
| Reduce Leaking Tank Cleanup Expenditures             |                                |         | (486)       | (486)       |
| Litter Control and Waste Reduction                   |                                |         | (5,500)     | (5,500)     |
| Completed Rulemaking Reduction                       | (.6)                           | (96)    |             | (96)        |
| Reduce Flood Plan Grants                             |                                |         | (2,000)     | (2,000)     |
| Eliminate Watershed Planning Program                 | (2.4)                          | (2,014) |             | (2,014)     |
| Shoreline Master Program                             | (.5)                           | (736)   |             | (736)       |
| Air Quality and Shorelands Fund Shift                |                                | (1,000) | 1,000       |             |
| Safe Transportation of Oil *                         | 12.3                           | , ,     | 2,795       | 2,795       |
| Oil Spill Risk Assessments *                         |                                |         | 500         | 500         |
| Hazardous Material Response Study                    |                                |         | 321         | 321         |
| Washington Safer Chemicals Act #                     | 2.4                            |         | 524         | 524         |
| Reducing Carbon Pollution                            | 23.8                           | 5,285   | 4,599       | 9,884       |
| Reduce Water Resources Expenditures to Match Revenue |                                |         | (236)       | (236)       |
| Reduce Woodstove Expenditures to Balance Account     |                                |         | (100)       | (100)       |
| Reduce Radioactive Mixed Waste Account               |                                |         | (800)       | (800)       |
| Headquarters Emergency Generator and HVAC            |                                | 428     | 1,390       | 1,818       |
| Replacement  |                                |         |             |             |
| Upgrade to SharePoint 2013                           | .9                             | 102     | 319         | 421         |
| Regional and Field Office Moves                      | .1                             | 152     | 488         | 640         |
| Washington Conservation Corps Minimum Wage           |                                | 183     |             | 183         |
| Authorizing Zero-Emission Vehicles #                 | 1.4                            | 238     |             | 238         |
| Oil Spill Response Equipment Grants                  | 4.6                            |         | 4,584       | 4,584       |
| Reduce Oil Spill Risk                                | 5.8                            |         | 1,354       | 1,354       |
| Expanding Local Source Control                       | 4.0                            |         | 2,240       | 2,240       |
| Implement Chemical Action Plans                      | 9.2                            |         | 2,671       | 2,671       |
| Technology Innovation Grants                         | .6                             |         | 2,104       | 2,104       |
| Lean and Green Business Assistance                   | .9                             |         | 998         | 998         |
| Study Toxics Sources in Stormwater                   | .2                             |         | 864         | 864         |
| Water Quality Improvement for Toxics                 | 3.6                            |         | 789         | 789         |
| Advancing Safer Products                             | 1.2                            |         | 812         | 812         |
| Lower Duwamish River Source Control                  | 2.1                            |         | 715         | 715         |
| Regional Stormwater Monitoring Program               | 1.0                            |         | 5,180       | 5,180       |
| Preventing Nonattainment                             | 2.3                            |         | 408         | 408         |
| Hanford Tank Permit and Compliance                   | 3.5                            |         | 548         | 548         |
| Complying With Air Quality Lawsuits                  | 2.5                            |         | 448         | 448         |
| Clean and Safe Groundwater                           | 3.0                            |         | 626         | 626         |

|  | Annual FTEs General Fund State |        | Other Funds | Total Funds |
|--|--------------------------------|--------|-------------|-------------|
| Spokane River Innovative Collaboration   |                                |        | 120         | 120         |
| Meeting Air Operating Permit Needs   | .3                             |        | 66          | 66          |
| Biosolids Permitting   | 1.2                            |        | 164         | 164         |
| CTS Rate Adjustment  |                                | (6)    | (20)        | (26)        |
| Archives/Records Management  |                                |        | (1)         | (1)         |
| Legal Services   |                                | 19     | 67          | 86          |
| Office of Chief Information Officer  |                                | 6      | 21          | 27          |
| CTS Central Services   |                                | 53     | 185         | 238         |
| DES Central Services   |                                | 11     | 37          | 48          |
| Core Financial Systems Replacement   |                                | 19     | 65          | 84          |
| Fleet Program Rate Reduction   |                                | (6)    | (20)        | (26)        |
| Time, Leave and Attendance System  |                                | 26     | 91          | 117         |
| Self-Insurance Liability Premium   |                                | (14)   | (49)        | (63)        |
| State Public Employee Benefits Rate  |                                | 62     | 305         | 367         |
| WFSE General Government Master Agreement   |                                | 1,409  | 7,339       | 8,748       |
| Nonrepresented Job Class Specific Increases  |                                | 6      | 44          | 50          |
| General Wage Increase for State Employees  |                                | 337    | 1,690       | 2,027       |
| Subtotal   | 83.1                           | 4,464  | 37,259      | 41,723      |
| Total Proposed Budget  | 1,663.5                        | 64,195 | 438,942     | 503,137     |
| Difference   | 82.7                           | 13,188 | 30,296      | 43,484      |
| Percent Change from Current Biennium   | 5.2%                           | 25.9%  | 7.4%        | 9.5%        |
| Total Proposed Budget by Activity  |                                |        |             |             |
| Clarify Water Rights   | 5.9                            | 1,537  | 236         | 1,773       |
| Administration   | 160.6                          | 15,988 | 33,088      | 49,076      |
| Assess, Set, and Enhance Instream Flows  | 14.1                           | 4,418  | 286         | 4,704       |
| Clean up the Most Contaminated Sites First (Upland and Aquatic)  | 145.1                          |        | 42,779      | 42,779      |
| Clean Up Polluted Waters   | 33.2                           | 36     | 8,111       | 8,147       |
| Conduct Environmental Studies for Pollution Source   | 65.2                           | 139    | 14,933      | 15,072      |
| Identification and Control   | 00.2                           | 100    | 11,000      | 10,012      |
| Control Stormwater Pollution   | 58.7                           |        | 22,592      | 22,592      |
| Eliminate Waste and Promote Material Reuse   | 25.3                           | 51     | 5,134       | 5,185       |
| Prevent and Pick Up Litter   | 18.5                           |        | 2,377       | 2,377       |
| Ensure Dam Safety  | 11.3                           | 3,377  | 234         | 3,611       |
| Ensure Environmental Laboratories Provide Quality Data   | 6.2                            | 1,360  |             | 1,360       |
| Fund Local Efforts to Clean Up Toxic Sites and Manage or Reduce Waste  | 14.4                           |        | 6,171       | 6,171       |
| Restore the Air, Soil, and Water Contaminated from Past Activities at Hanford  | 15.5                           | 15     | 5,356       | 5,371       |
| Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford                                       | 9.3                            | 15     | 1,888       | 1,903       |
| Treat and Dispose of Hanford's High-Level Radioactive  | 31.9                           | 15     | 5,773       | 5,788       |
| Tank Waste Ensure Safe Tank Operations, Storage of Tank Wastes, &  | 16.1                           | 15     | 3,043       | 3,058       |
| Closure of the Waste Storage Tanks at Hanford<br>Ensure the Safe Management of Radioactive Mixed Waste<br>at Hanford | 16.4                           | 15     | 3,829       | 3,844       |

|  | Annual FTEs General Fund State |        | Other Funds | Total Funds |
|--|--------------------------------|--------|-------------|-------------|
| Improve Community Access to Hazardous Substance and Waste Information                                | 24.6                           |        | 4,503       | 4,503       |
| Improve Quality of Data Used for Environmental Decision Making                                       | 4.6                            | 134    | 931         | 1,065       |
| Increase Compliance and Act on Environmental Threats from Hazardous Waste                            | 32.6                           |        | 6,734       | 6,734       |
| Increase Safe Hazardous Waste Management   | 18.8                           |        | 9,918       | 9,918       |
| Manage Underground Storage Tanks to Minimize Releases  | 23.6                           |        | 4,820       | 4,820       |
| Manage Water Rights  | 51.5                           | 10,826 | 2,448       | 13,274      |
| Measure Air Pollution Levels and Emissions   | 24.7                           |        | 8,359       | 8,359       |
| Measure Contaminants in the Environment by Performing Laboratory Analyses                            | 30.6                           | 324    | 3,240       | 3,564       |
| Monitor the Quality of State Waters and Measure Stream Flows Statewide                               | 53.5                           | 1,598  | 11,277      | 12,875      |
| Improve Environmental Compliance at State's Largest Industrial Facilities                            | 22.8                           | 155    | 4,178       | 4,333       |
| Prepare and Respond to Drought   |                                |        | 244         | 244         |
| Prepare for Aggressive Response to Oil and Hazardous Material Incidents                              | 24.8                           |        | 5,586       | 5,586       |
| Prevent Hazardous Waste Pollution Through Permitting, Closure, and Corrective Action                 | 19.2                           |        | 5,139       | 5,139       |
| Prevent Point Source Water Pollution   | 89.3                           | 33     | 22,028      | 22,061      |
| Prevent Oil Spills from Vessels and Oil Handling Facilities  | 26.1                           |        | 7,223       | 7,223       |
| Prevent Unhealthy Air and Violations of Air Quality Standards  | 26.8                           |        | 12,908      | 12,908      |
| Promote Compliance with Water Laws   | 11.4                           | 2,367  |             | 2,367       |
| Protect and Manage Shorelines in Partnership with Local  | 29.9                           | (49)   | 13,843      | 13,794      |
| Governments  |                                | , ,    |             |             |
| Protect Water Quality by Reviewing and Conditioning Construction Projects                            | 12.9                           | 1,396  | 1,265       | 2,661       |
| Protect, Restore, and Manage Wetlands  | 29.1                           |        | 26,498      | 26,498      |
| Provide Technical and Financial Assistance to Local Governments to Reduce Flood Hazards              | 8.0                            | 15     | 325         | 340         |
| Provide Technical Assistance on State Environmental Policy Act (SEPA) Review                         | 6.6                            |        | 1,414       | 1,414       |
| Provide Technical Training, Education, and Research through Padilla Bay Estuarine Reserve            | 17.5                           |        | 4,427       | 4,427       |
| Provide Water Quality Financial Assistance   | 49.3                           | 239    | 38,583      | 38,822      |
| Provide Water Resources Data and Information   | 33.0                           | 6,956  | 907         | 7,863       |
| Reduce Air Pollution from Industrial and Commercial Sources  | 17.7                           | 9      | 3,955       | 3,964       |
| Reduce Health and Environmental Threats from Motor Vehicle Emissions                                 | 17.8                           | 3,935  |             | 3,935       |
| Reduce Health and Environmental Threats from Smoke   | 14.3                           |        | 2,921       | 2,921       |
| Reduce Nonpoint-Source Water Pollution   | 31.6                           | 65     | 6,939       | 7,004       |
| Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment                                   | 1.4                            |        | 966         | 966         |
| Reduce Risk from Toxic Air Pollutants  | 6.2                            |        | 1,259       | 1,259       |
| Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical Assistanc | 22.6                           |        | 5,083       | 5,083       |

|  | Annual FTEs General Fund State |        | Other Funds | Total Funds |
|--|--------------------------------|--------|-------------|-------------|
| Regulate Well Construction   | 6.5                            |        | 1,544       | 1,544       |
| Rapidly Respond to and Clean Up Oil and Hazardous Material Spills                                | 42.0                           |        | 21,987      | 21,987      |
| Restore Public Natural Resources Damaged by Oil Spills   | 2.8                            |        | 2,231       | 2,231       |
| Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps | 57.2                           | 175    | 12,786      | 12,961      |
| Services to Site Owners that Volunteer to Clean Up their Contaminated Sites                      | 28.0                           |        | 5,561       | 5,561       |
| Provide Streamlined Project Permitting for Transportation Projects                               | .8                             | 102    | 46          | 148         |
| Provide Regulatory Assistance for Significant Projects and Small Businesses                      |                                | 184    | 374         | 558         |
| Support Water Use Efficiency   | 1.6                            | 111    | 545         | 656         |
| Climate Change Mitigation and Adaptation   | 33.0                           | 6,665  | 5,201       | 11,866      |
| Manage Solid Waste Safely  | 22.5                           |        | 4,117       | 4,117       |
| Reduce Toxic Chemicals in Products and Promote Safer Alternatives                                | 33.9                           |        | 10,699      | 10,699      |
| Support Watershed-Based Water Supply and Resource Stewardship                                    | 5.8                            | 1,974  | 100         | 2,074       |
| Total Proposed Budget  | 1,663.5                        | 64,195 | 438,942     | 503,137     |

## PERFORMANCE LEVEL CHANGE DESCRIPTIONS

## **Reduce Leaking Tank Cleanup Expenditures**

State Toxics Control Account-Private/Local expenditure authority is reduced on an ongoing basis to align with projected cost recovery revenue collected from potentially liable parties at cleanup sites initially funded with Ecology's federal grant for leaking underground storage tanks. (State Toxics Control Account-Private/Local)

#### **Litter Control and Waste Reduction**

Funding is reduced on a one-time basis to reflect lower revenue in the Waste Reduction, Recycling and Litter Control Account. This will result in less litter pickup and waste reduction work across the state. (Waste Reduction, Recycling and Litter Control Account-State)

## **Completed Rulemaking Reduction**

Funding and FTE staff are reduced on an ongoing basis to reflect completion of the Water Quality program's participation in a forest practices rulemaking process required by Section 203, Chapter 1, Laws of 2012, 1st Special Session (Substitute Senate Bill 6406), relating to natural resources management.

#### **Reduce Flood Plan Grants**

The Flood Control Assistance Account program provides grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management plans. The Flood Control Assistance Account that funds this work receives its revenue from transfers from the state general fund. Continuing a temporary reduction that began during the 2009-11 biennium, funding is reduced permanently for competitive grants to local governments for flood hazard reduction projects. (Flood Control Assistance Account-State)

## **Eliminate Watershed Planning Program**

The Department of Ecology's Watershed Planning Technical and Financial Assistance Program provides assistance to local watershed groups to develop plans and address watershed issues. Over 30 watersheds have adopted plans since the program's inception in 1997. State general funds provided for this work are permanently eliminated. The four remaining planning units eligible for implementation grants during the 2015-17 biennium will not receive funding (located in the Wind, Chelan, Lower Lake Roosevelt and Lower Spokane watersheds), and implementation projects will no longer be funded through this program.

# **Shoreline Master Program**

General Fund-State funding and FTE staff are permanently eliminated from the Shoreline Master program. This will result in less grant funding available to local governments responsible for updating their development regulations under the state Shoreline Management Act (Chapter 90.58 RCW), and fewer staff at the Department of Ecology to provide technical assistance to local governments planning.

## Air Quality and Shorelands Fund Shift

A total of \$1.0 million of General Fund-State expenditures for the Department of Ecology's Air Quality program and the Shorelands and Environmental Assistance program are shifted permanently to the State Toxics Control Account. Specific work to be shifted includes reducing air pollution from commercial and industrial sources and reviewing and conditioning construction projects. (General Fund-State, State Toxics Control Account-State)

# Safe Transportation of Oil \*

The Department of Ecology issued a draft study in December 2014 with findings and recommendations to improve the safety of oil transported across Washington by rail and new marine routes. Contingent on passage of executive request legislation, a combination of one-time and ongoing funding and FTE staff are provided for: 1) oil spill contingency planning by railroads transporting oil in bulk; 2) rulemaking and modification of technology systems to accommodate advance notice of oil transfer data from railroads and pipelines; and 3) extension of financial-responsibility requirements to rail and mobile facilities. A total of \$3.8 million of oil spill work funded by the State Toxics Control Account is shifted to the Oil Spill Prevention Account, which will receive increased revenue from an increase in the oil spill prevention tax. (Oil Spill Prevention Account-State, State Toxics Control Account-State)

## Oil Spill Risk Assessments \*

Vessel traffic risk assessments (VTRAs) measure changes in oil spill risk and help decision makers to ensure that prevention, preparedness and response measures are in place. Ongoing funding is provided to conduct VTRAs in areas of the state where they presently do not exist (Grays Harbor, Columbia River and the outer coast) and to periodically update VTRAs in future years, beginning with the Puget Sound assessment completed in March 2014. (Oil Spill Prevention Account-State)

## **Hazardous Material Response Study**

Increasing rail shipments of Bakken crude oil present public safety risks due to its greater volatility and flammability. Previous studies of hazardous materials response capability occurred in 1993 and 2005. One-time funding is provided to conduct a gap analysis of hazardous materials response capability in Washington by March 2016. The analysis will update previous studies and program descriptions, propose potential funding mechanisms, and may include legislative recommendations. Study scope will include assessing the current need for state-supported regional hazardous materials response teams, team composition and requirements for equipment and training, where teams should be located, and how they will provide mutual aid response to neighboring jurisdictions. (State Toxics Control Account-State)

## Washington Safer Chemicals Act #

One-time funding and FTE staff are provided for the department to write rules required under executive request legislation directing manufacturers and users of certain chemicals of concern to take steps that reduce or eliminate use of these chemicals. During the 2015-17 biennium, the department will adopt rules for identifying problem chemicals, including those slated for potential chemical action plan development. (State Toxics Control Account-State)

#### **Reducing Carbon Pollution**

To implement the Carbon Pollution Accountability Act, funding and FTE staff are provided for oversight and implementation of a new carbon market program, including compliance and enforcement, technical assistance, information technology work, data collection, emitter reporting and market monitoring. One-time bridge funding from General Fund-State is provided for carbon-market costs that will be incurred before the Carbon Pollution Reduction Account has sufficient revenue. In addition, biennial costs for greenhouse gas reporting will occur before revenue is available in the Air Pollution Control Account. (General Fund-State, Air Pollution Control Account-State, Carbon Emissions Reduction Account-State)

# Reduce Water Resources Expenditures to Match Revenue

Expenditure authority is reduced on an ongoing basis to match expected revenues in the Basic Data Account and the Water Rights Processing Account. These accounts fund streamflow data collection and water rights processing activity in the Water Resources program. (Basic Data Account-Nonappropriated, Water Rights Processing Account-State)

## **Reduce Woodstove Expenditures to Balance Account**

Expenditure authority is reduced permanently in the Wood Stove Education and Enforcement Account to reflect lower revenues. This will result in less funding for public education on pollution-reducing ways to use woodstoves and for grants to local air authorities. (Wood Stove Education and Enforcement Account-State)

#### **Reduce Radioactive Mixed Waste Account**

Expenditure authority is reduced in the Radioactive Mixed Waste Account to reflect available fund balance. (Radioactive Mixed Waste Account-State)

## **Headquarters Emergency Generator and HVAC Replacement**

The Department of Ecology is using Certificates of Participation to finance upgrades to the heating, ventilation and air conditioning system (HVAC) and to replace the emergency generator at its Lacey headquarters facility. Ongoing funding is provided to cover the cost of debt service. (General Fund-State, State Toxics Control Account-State, Water Quality Permit Account-State, various other accounts)

## **Upgrade to SharePoint 2013**

The Department of Ecology routinely uses SharePoint 2007 for internal staff collaboration and stakeholder involvement. The manufacturer of SharePoint 2007 will stop supporting the program during the 2015-17 biennium and the hardware platform that supports the application is reaching end of life and needs to be replaced. A combination of one-time and ongoing funding and FTE staff are provided to manage the SharePoint 2013 upgrade and pay ongoing software maintenance costs. This upgrade will allow Ecology to modernize and improve security for the SharePoint 2013 environment, continue working efficiently through technology-based collaboration, and respond more quickly to the public, particularly to public disclosure requests. (General Fund-State, State Toxics Control Account-State, Water Quality Permit Account-State, various other accounts)

## **Regional and Field Office Moves**

Ecology field offices in Vancouver and the central region are scheduled for relocation during the next two years. A combination of one-time and ongoing funding and FTE staff are provided to cover the cost of coordinating and moving staff, equipment, furniture, technology infrastructure, agency records, and for future lease costs at the Vancouver field office. Ongoing funding is provided for furniture for the central region office, which will be financed through Certificates of Participation. (General Fund-State, State Toxics Control Account-State, Water Quality Permit Account-State, various other accounts)

# **Washington Conservation Corps Minimum Wage**

The Department of Ecology's Washington Conservation Corps (WCC) employs young adult AmeriCorps members to work on a variety of natural resource and emergency projects, including habitat restoration, trail construction, and wildland fire response. Ongoing funding is provided to support a corpsmember minimum wage increase to \$9.47 per hour in 2015.

## Authorizing Zero-Emission Vehicles #

California's clean car standards include a provision requiring automobile manufacturers to develop and market cars that emit zero harmful tailpipe emissions, such as plug-in electric and fuel-cell powered vehicles. When Washington State adopted California's clean car standards in 2005, it specifically prohibited adopting the Zero-Emission Vehicle (ZEV) provision. Pending adoption of agency-request legislation to authorize Washington's participation in the ZEV program (as part of the Governor's climate initiative), a combination of one-time and ongoing funding and FTE staff are provided to update Washington's clean car regulations to incorporate the ZEV provision and coordinate and implement the program over the long term.

## **Oil Spill Response Equipment Grants**

The expansion of crude oil imports from Canada, North Dakota and other states that are transported via rail through Washington increases the risk of oil spill incidents. At least 10 to 15 proposals for new or expanded oil facilities are moving through state permitting processes. If approved, these proposals will bring millions of barrels of crude oil on rail through communities like Seattle, Spokane, Bellingham, Vancouver, and Grays Harbor. To better prepare local communities for rapid response to potential oil spills from rail incidents, ongoing funding and FTE staff are provided to strategically place oil spill response equipment caches where needed through an ongoing local government grant program. (State Toxics Control Account-State, Local Toxics Control Account-State)

## Reduce Oil Spill Risk

In rapidly increasing frequency and volume, crude oil is imported into Washington by railroad from Canada, the Dakotas and other states and then stored or refined in shore-side facilities. This shifts the risk of oil spills inland along rail corridors and increases the number of times oil is transferred to reach the refineries. At the same time, Ecology expects a significant change in vessel traffic over the next several years due to a variety of proposed oil projects. The department received one-time funding in the 2014 supplemental budget for additional resources to: 1) develop preparedness and response tools for mitigating oil spills to rivers and streams; and 2) analyze the changing risks associated with crude oil moved by rail and vessels. Ongoing funding and FTE staff are provided to complete and maintain the response tools along rail corridors and marine waterways, and retain staff expertise on spill risk assessment, mitigation, and rapid oil spill response. (Oil Spill Prevention Account-State)

## **Expanding Local Source Control**

Stormwater pollution is often the source of toxic contaminants, and small businesses using toxic materials have opportunities for pollution reduction. Through the Local Source Control (LSC) partnership, the Department of Ecology contracts with local specialists to offer technical and regulatory assistance to small businesses to prevent spills, identify illicit wastewater discharges, correct problems with oil/water separators, ensure storm drains are protected, and protect employees through proper storage and labeling of chemicals and hazardous wastes. The LSC partnership is limited to the Puget Sound and Spokane River Basins. Ongoing funding and FTE staff are provided to add additional LSC capacity in the Columbia River Basin, provide support to new local partners, and implement source tracing and watershed monitoring studies to better target site visits. (State Toxics Control Account-State, Local Toxics Control Account-State)

## **Implement Chemical Action Plans**

Thousands of toxic chemicals are currently in use and some have characteristics that make them challenging and expensive to deal with if released into the environment. Often such chemicals impact air, water, and sediment resulting in a high likelihood that people and the environment can be harmed. The Department of Ecology addresses such chemicals through Chemical Action Plans (CAPs). CAPs identify chemical sources and releases and recommend steps to reduce impacts or phase out chemical uses. A combination of one-time and ongoing funding and FTE staff are provided to increase the number of CAPs developed each year, implement CAP recommendations, and monitor the results to reduce the impacts of toxic chemicals in Washington. (State Toxics Control Account-State)

## **Technology Innovation Grants**

Consumer products made from chemicals designed to be safe for people and the environment are still the exception, not the rule. The emerging field of green chemistry designs chemicals with no or lower toxicity for products and processes, thus avoiding the creation of toxics and wastes. Ongoing funding is provided for competitively awarded contracts to develop marketable, safer chemical alternatives to such common products as zinc in galvanized flashing and petroleum-based plastics. (Environmental Legacy Stewardship Account-State)

## Lean and Green Business Assistance

The Department of Ecology provides business assistance combining Lean manufacturing and environmental expertise as a way for Washington businesses to save money, avoid the need for costly environmental permits, and significantly reduce toxic chemicals, energy consumption, and water use. Ongoing funding and FTE staff are provided to increase business participation by: 1) adding a critical marketing component to increase awareness of these services; 2) integrating energy audits into the program; 3) defraying businesses' costs for consulting services; and 4) providing financial assistance to jump-start recommendations. (Environmental Legacy Stewardship Account-State)

#### **Study Toxics Sources in Stormwater**

Stormwater runoff is the largest source of toxic pollutants in urban waters. Two of the largest sources of runoff pollution are from roadways and roofs. Not enough is known about the direct impacts these two sources have on water quality, and research is needed to develop possible control measures. A combination of one-time and ongoing funding and FTE staff are provided to carry out studies related to the sources of toxics in stormwater, including roofing materials and tires, as well as stormwater impacts on salmonids. This research, conducted by the Washington State University Stormwater Center in Puyallup, will help inform stormwater management practices that more effectively identify, prevent, and control releases of toxics. (State Toxics Control Account-State)

## **Water Quality Improvement for Toxics**

Many rivers and coastal waters in Washington are not meeting water quality standards for toxic chemicals. Ongoing funding and FTE staff are provided to accelerate the process of identifying chemical sources and implementing actions to bring watersheds back into compliance to protect beneficial uses, like swimming and fishing, and to reduce human and wildlife exposure to harmful chemicals. Specific actions include: 1) conducting scientific studies to identify the sources of toxic chemicals; 2) working with local stakeholders to implement actions to address identified sources of water pollution; and 3) developing pollution-control programs for permitted and non-permitted discharges. (Environmental Legacy Stewardship Account-State)

### **Advancing Safer Products**

Growing concern about toxic chemicals in consumer products makes it important to prioritize these chemicals and find safer alternatives. Using safer alternatives protects people from harmful chemicals in products, protects the environment from contamination that would require expensive cleanup, and prevents potential recontamination of existing cleanup sites. Removing toxic chemicals from products also helps permittees meet water quality discharge limits. Ongoing funding and FTE staff are provided to assess alternatives for toxic chemicals and to help businesses understand and incorporate the recommendations into their industrial processes. (State Toxics Control Account-State)

## **Lower Duwamish River Source Control**

The U.S. Environmental Protection Agency announced a \$342 million Superfund cleanup of the Lower Duwamish Waterway (LDW) in late 2014. The Department of Ecology's role in this work is to control sources of pollution so cleanup can begin and protect the investment in sediment cleanup. Without source control, pollution of the LDW and Puget Sound will continue. Both regulated and unregulated sources of pollution degrade water quality, contaminate fish and wildlife, and affect people's use of the river. Ongoing funding and FTE staff are provided to improve water quality permit implementation; strengthen strategic collaboration between water quality, cleanup, and toxics reduction efforts; and develop a watershed pollutant loading assessment modeling tool to help determine progress on cleanup and clean water goals. (Environmental Legacy Stewardship Account-State)

## **Regional Stormwater Monitoring Program**

Ongoing funding and FTE staff are provided to administer a program of regional monitoring, effectiveness studies, and analysis of stormwater pollution reduction efforts paid for by local governments participating in the Regional Stormwater Monitoring Program (RSMP). This monitoring is necessary to support data-driven decisions to improve stormwater management programs, and is required under the new general municipal stormwater National Pollution Discharge Elimination System Phase 1 and Phase 2 Western Washington permits. The western Washington permittees worked with the Department of Ecology to develop a regional program to perform the required monitoring, studies and analyses administered through the RSMP, rather than conducting the work individually. (General Fund-Private/Local)

## **Preventing Nonattainment**

When national air quality standards are violated, federal law requires costly and rigorous regulatory interventions to return communities to clean air status. More than a dozen communities in Washington risk violating federal air quality standards, especially for fine-particle pollution and ozone. It is less costly to prevent such violations than to deal with their consequences. Ongoing funding and FTE staff are provided to conduct community-level air quality assessments and work closely with elected officials, citizens, local agencies, businesses and civic leaders in the state's highest-risk areas to help design preventive air pollution solutions. (Environmental Legacy Stewardship Account-State)

## **Hanford Tank Permit and Compliance**

New environmental and safety threats at Hanford are associated with waste tank leaks, tank waste treatment delays, and storage of cesium and strontium capsules. In March 2014, the Department of Ecology issued an administrative order to require the U.S. Department of Energy (USDOE) to remove waste from a leaking double shell tank. USDOE is not meeting milestones set in a federal consent decree for tank waste treatment, resulting in increased compliance and permitting work for Ecology. In response to these tank waste problems and to address safe storage of cesium/strontium capsules, the USDOE has proposed three new facilities that will require permitting and oversight by Ecology. Ongoing funding and FTE staff are provided to carry out this federally-funded work so that radioactive waste is appropriately managed. Costs will be paid for by USDOE through regulatory oversight fees. (Radioactive Mixed Waste Account-State)

# **Complying With Air Quality Lawsuits**

Clean air lawsuits, judicial decisions, and still-pending court actions are driving changes in federal clean air regulations. These changes have created a backlog of related updates to state air quality regulations and federally-mandated state clean air plans. Federal lawsuits are compelling the U.S. Environmental Protection Agency to assert its oversight role on delinquent states. Failure by the state to submit timely updated regulations and plans results in a confused and conflicting regulatory landscape that increases costs and liability for business, impedes economic development and growth, and risks imposition of less-flexible federal air quality plans and loss of state control over air quality management. Ongoing funding and FTE staff are provided to update state implementation plans and regulations to better align the state's regulatory framework with federal regulatory requirements. (Environmental Legacy Stewardship Account-State)

#### Clean and Safe Groundwater

Groundwater is a drinking water source for over 65 percent of our state's population and is used for industry, agriculture, and to sustain stream flows for salmon. The state's groundwater supply is stressed by infiltrating chemicals, changing climate, and increasing consumer demand. Despite the critical nature of groundwater, Washington lacks a systematic, statewide program to track status and trends in groundwater conditions. A combination of one-time and ongoing funding and FTE staff is provided to consolidate and standardize existing groundwater data into an organized information system as the first step to managing groundwater resources over the long term. Ecology will use this data to determine future monitoring needs. (State Toxics Control Account-State)

#### **Spokane River Innovative Collaboration**

The Spokane River Regional Toxics Task Force's innovative collaborative partnership works toward achieving water quality standards for toxics, specifically polychlorinated biphenyls (PCBs) in the Spokane River. The Task Force received one-time funding from the Department of Ecology during the 2013-15 biennium to begin actions to clean up the river. Continued contracted services are needed to help facilitate the work of the Task Force to identify, implement, and measure the reduction of toxic chemical inputs to the river. One-time funding is provided for this facilitation for a maximum of two more years. (State Toxics Control Account-State)

## **Meeting Air Operating Permit Needs**

Industrial facilities that emit large amounts of air pollution are regulated by the Department of Ecology under the federally-mandated Air Operating Permit program. Under both federal and state law, the costs of the program must be fully supported with fees paid by these air pollution sources. Based on fee criteria and formulas specified in statute, Ecology intends to increase fees during the 2015-17 biennium to cover the cost of serving new sources entering the program, including writing permits, conducting inspections and updating emission inventories. Ongoing funding and FTE staff are provided to carry out this work. (Air Operating Permit Account-State)

## **Biosolids Permitting**

The Biosolids program provides oversight, permitting, and technical assistance for sewage treatment plants, facilities that manage wastewater from septic systems, and other facilities that generate, treat and use biosolids. Biosolids are a product of wastewater treatment and septic tanks, comprised primarily of organic material that can be beneficially used to condition soil and enhance plant growth, after meeting requirements under Ecology's Biosolids management rule. Ongoing funding and FTE staff are provided to increase technical assistance, enforcement, and compliance inspections of permit applicants. This will help Ecology keep pace with increased customer demands and population growth, while protecting public health and the environment through properly managed biosolids. (Biosolids Permit Account-State)

## **CTS Rate Adjustment**

Agency budgets are adjusted to reflect changes in Consolidated Technology Services (CTS) rates. Specific changes include a reduction in metered storage rates and elimination of tailored storage rates, elimination of redundant firewalls, reduction in long distance telephone rates, a general rate reduction to reflect administrative efficiencies within CTS, and enhancements to the identity management service.

# **Archives/Records Management**

Agency budgets are adjusted to update each agency's allocated share of charges and to reflect a 10 percent reduction in the number of boxes submitted for records storage.

# **Legal Services**

Agency budgets are adjusted to update each agency's allocated share of charges and to reflect a reduction in legal service charges. The Attorney General's Office (AGO) will work with client agencies to implement stricter policies and best practices regarding utilization of its services to achieve lower legal bills.

#### Office of Chief Information Officer

Agency budgets are adjusted to update each agency's allocated share of charges and to reflect increased billing levels for software subscriptions and office relocation.

## **CTS Central Services**

Agency budgets are adjusted to update each agency's allocated share of charges from Consolidated Technology Services (CTS) to reflect an increase in business continuity/disaster recovery costs and a new allocated charge for state data network costs.

#### **DES Central Services**

Agency budgets are adjusted to update each agency's allocated share of charges and to align with anticipated billing levels from the Department of Enterprise Services (DES) in the 2015-17 biennium, including changes to the enterprise systems fee, personnel services, and small agency financial services.

## **Core Financial Systems Replacement**

Agency budgets are adjusted to align with anticipated billings from the Office of Financial Management in the 2015-17 biennium for core financial systems replacement planning through the One Washington project.

## Fleet Program Rate Reduction

Agency budgets are adjusted to reflect efficiencies and reduced costs for the Department of Enterprise Services' fleet program.

## Time, Leave and Attendance System

Agency budgets are adjusted to align with anticipated billings for the Time, Leave and Attendance system, including debt service and project completion costs.

# **Self-Insurance Liability Premium**

Agency budgets are adjusted to reflect updated premium rates and a reduction in billings for the 2015-17 biennium.

## State Public Employee Benefits Rate

Health insurance funding is provided for state employees who are not represented by a union or who are covered by a bargaining agreement that is not subject to financial feasibility determination. Insurance for employees covered by the health insurance coalition is included in funding for their respective collective bargaining agreements. The insurance funding rate is \$913 per employee per month for Fiscal Year 2016 and \$947 per employee per month for Fiscal Year 2017. (General Fund-State, various other accounts)

## **WFSE General Government Master Agreement**

Funding is provided for a collective bargaining agreement with Washington Federation of State Employees (WFSE), which includes a general wage increase of 3 percent, effective July 1, 2015; a general wage increase of 1.8 percent for all employees who earn \$2,500 a month or more, effective July 1, 2016; a general wage increase of 1 percent plus a \$20 per month increase for all employees who earn less than \$2,500 per month, effective July 1, 2016; salary adjustments for targeted classifications; hazard pay for designated night crews; assignment pay in designated areas; and employee insurance. (General Fund-State, various other accounts)

## Nonrepresented Job Class Specific Increases

Funding is provided for classified state employees who are not represented by a union for pay increases in specific job classes in alignment with other employees. (General Fund-State, various other accounts)

## **General Wage Increase for State Employees**

Funding is provided for wage increases for state employees who are not represented by a union or who are covered by a bargaining agreement that is not subject to financial feasibility determination. It is sufficient for a general wage increase of 3 percent, effective July 1, 2015; a general wage increase of 1.8 percent for employees who earn \$2,500 a month or more, effective July 1, 2016; and a general wage increase of 1 percent plus a \$20 per month increase for employees who earn less than \$2,500 per month, effective July 1, 2016. This item includes both higher education and general government workers. (General Fund-State, various other accounts)

## **ACTIVITY DESCRIPTIONS**

# **Clarify Water Rights**

The agency provides support for water rights adjudication. Adjudication is fundamental to sound water management by increasing certainty regarding the validity and extent of water rights and reducing water conflicts. It is a judicial determination of existing water rights and claims, including federal, tribal, and non-tribal claims. The current focus is completing the Yakima River Basin surface water adjudication and pre-adjudication work in the Spokane area and Colville watershed.

#### Administration

The administration activity supports agency functions by providing leadership, cross-program support, and staff presence throughout the state. Administration manages the agency's long-term financial health and provides information to support sound decision-making and resource management by managers. Communication, education, and outreach tools play a major role in protecting and improving the environment. Administration staff serve as liaisons to Congress, the state Legislature, local governments, businesses, Indian tribes, and environmental and citizen groups. Administration helps managers and employees create a safe, supportive, and diverse work environment by providing comprehensive human resource services. It also oversees information management (desktop and network services, application development, and data administration) and facility and vehicle management; maintains the agency's centralized records and library resources; responds to public records requests; and provides mail services.

#### Assess, Set, and Enhance Instream Flows

The agency evaluates and sets instream flows that are fundamental to water resources management. Instream flows are used to determine how much water needs to remain in streams to meet environmental needs, how much can be allocated, and when to regulate junior water users based on flow levels. The agency acquires water and uses other management techniques to restore and protect flows, while meeting out-of-stream needs.

## Clean up the Most Contaminated Sites First (Upland and Aquatic)

Ecology protects public health and natural resources by cleaning up and managing contaminated upland sites and contaminated sediments in the aquatic environment. Resources are first focused on cleaning up contaminated sites that pose the greatest risk to public health and the environment. These include sites where contamination threatens drinking water, exists in a large quantity, is very toxic, may affect a waterbody or the environmental health of sediments, or may affect people that are living, working, or recreating near the site. Contamination may be in the soil, sediments, underground water, air, drinking water, or surface water. Ecology also manages multi-agency upland and sediment cleanup projects. Cleaning up these sites protects public health, safeguards the environment, and promotes local economic development by making land available for new industries and other beneficial uses.

## **Clean Up Polluted Waters**

The federal Clean Water Act requires the agency to develop water quality standards and to identify water bodies that fail to meet those standards. The agency does this by reviewing thousands of water quality data samples and publishing an integrated water quality assessment report. This report lists the water bodies that do not meet standards. Ecology then works with local interests to prepare water quality improvement reports to reduce pollution, establish conditions in discharge permits and nonpoint-source management plans, and monitor the effectiveness of the improvement report.

#### Conduct Environmental Studies for Pollution Source Identification and Control

Ecology conducts pollution studies to address known or suspected problems at specific sites and across regional areas. These studies support agency efforts under the federal Clean Water Act, as well as the state Water Pollution Control and Model Toxics Control Acts. Studies range from simple water quality sampling for bacteria or dissolved oxygen, to very complex projects measuring toxic contaminants in fish tissues or pesticides in groundwater. Many projects are water cleanup studies, which calculate the total maximum daily load (TMDL) of a pollutant a water body can absorb without causing violations of water quality standards. Under a memorandum of agreement with the Environmental Protection Agency (EPA), Ecology must develop nearly 1,500 TMDLs by 2013. Study results are published in scientific reports used for regulatory decision making, policy development, and environmental health protection.

## **Control Stormwater Pollution**

Ecology prepares tools, provides assistance, and offers compliance strategies to control the quantity and quality of stormwater runoff from development and industrial activities. The agency currently provides training and assistance to communities and industries on stormwater manuals and the Western Washington hydrology model. Ecology works with local governments and other stakeholders to implement a municipal stormwater program and permitting system.

#### **Eliminate Waste and Promote Material Reuse**

In order to eliminate waste whenever possible and use the remaining waste as resources, the Department of Ecology:

- \* Provides technical assistance to local governments for waste reduction and recycling programs;
- \* Works with industry to overcome barriers to construction and demolition material reuse and recycling;
- \* Develops regulations and provides technical assistance to promote reuse of organic materials and ensures an environmentally compliant biosolids program in the state.; and
- \* Advises state and local governments on how to promote environmentally preferred purchasing.

## Prevent and Pick Up Litter

Litter control efforts include Ecology Youth Corps litter pick up crews, Community Litter Cleanup contracts, and coordination with other state and local efforts to maximize litter pick up. Litter prevention and pick up helps to keep Washington green, supports tourism, and provides employment opportunities to youth.

## **Ensure Dam Safety**

This activity protects life, property, and the environment by overseeing the safety of Washington's dams. This includes inspecting the structural integrity and flood and earthquake safety of existing state dams not managed by the federal government; approving and inspecting new dam construction and repairs; and taking compliance and emergency actions.

# **Ensure Environmental Laboratories Provide Quality Data**

Ecology accredits environmental laboratories that submit data to the agency. The accreditation program covers analyses in all typical environmental matrices (water, sediment, tissue), including drinking water. Accreditation helps ensure environmental laboratories have the demonstrated capability to provide accurate and defensible data. Ecology's laboratory accreditation program is the primary source of performance monitoring for the 480 labs in the accreditation program.

#### Fund Local Efforts to Clean Up Toxic Sites and Manage or Reduce Waste

The Department of Ecology protects public health and promotes resource recovery through the administration of three capital grant programs. Coordinated Prevention Grants support local government activities to protect groundwater, recycling and reuse programs, hazardous substance use reduction, and moderate risk waste collection (hazardous waste generated from households and small businesses). New initiatives focus on reuse of organic materials, reduction of building construction waste, and reduction of toxicity in products. Remedial Action Grants provide funding to local governments to cleanup property contaminated by hazardous substances to protect human health and environmental resources such as groundwater. Restored properties can then be redeveloped. Participation Grants provide funding for interest groups to inform citizens of local cleanups and for waste reduction efforts. (Authorizing Laws: 70.105D, Model Toxics Control Act; RCW 70.93, Waste Reduction, Recycling, and Model Litter Control Act; RCW 70.105, Hazardous Waste Management Act; and RCW 70.95, Solid Waste Management - Reduction and Recycling)

## Restore the Air, Soil, and Water Contaminated from Past Activities at Hanford

The agency protects public health and natural resources by working to restore the public use of air, soil, and water at the Hanford Nuclear Reservation by cleaning up contaminated sites from past activities. Radioactive and hazardous contaminants are removed, residual contaminants are contained and monitored, and mitigation of natural resource damage on Hanford occurs.

# Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford

The agency oversees the decommissioning of the large, complex, and high-risk facilities throughout the Hanford Nuclear Reservation, including nuclear reactors and chemical processing facilities used for nuclear weapons material production. Transition of these facilities to safe and stable conditions requires coordination of multiple regulatory and technical requirements. The agency is also responsible for regulatory oversight of waste management activities at four facilities not under the management of the U.S. Department of Energy (Energy Northwest, AREVA, Perma-Fix Northwest, and the U.S. Navy's Puget Sound Naval Shipyard).

## Treat and Dispose of Hanford's High-Level Radioactive Tank Waste

The agency protects public health and natural resources by providing regulatory oversight for the treatment and removal of highly radioactive tank waste at the Hanford Nuclear Reservation. This activity is focused on the design, permitting, construction, and operation of the Hanford Waste Treatment Plant, the Integrated Disposal Facility (a mixed, low-level waste landfill), and immobilized high-level waste storage facility.

## Ensure Safe Tank Operations, Storage of Tank Wastes, & Closure of the Waste Storage Tanks at Hanford

The agency protects public health and natural resources by ensuring the safe storage and management of 53 million gallons of high-level radioactive tank waste at the Hanford Nuclear Reservation. The Hanford Tank Waste Project is focused on permitting the double-shelled tank waste storage system, removing liquid wastes from the single-shelled tanks, and beginning to close portions of the tank waste storage system. In coordination with the Hanford Tank Waste Disposal Project, the tank waste will be removed and treated, leading to eventual closure of all 177 Hanford tanks by 2028.

## Ensure the Safe Management of Radioactive Mixed Waste at Hanford

The agency provides regulatory oversight for the safe storage, treatment, and disposal of liquid and solid dangerous and radioactive mixed wastes at the Hanford Nuclear Reservation, as well as at radioactive mixed-waste sites throughout the state. This activity regulates the management of this historic and ongoing waste stream, and ensures the retrieval, treatment, and safe disposal of high-risk transuranic and high activity wastes currently buried in shallow, unlined trenches.

## Improve Community Access to Hazardous Substance and Waste Information

The agency uses automated data systems to track compliance and technical assistance visits; measure pollution prevention and compliance progress; track amounts of dangerous waste generated each year and its proper transport, treatment, and/or disposal; identify toxic chemicals released and stored by businesses; and track information on facilities that prepare pollution prevention plans and pay fees. These data systems provide Ecology, the public, and local governments with accurate information about the type, location, and source of hazardous substances that affect them. In accordance with federal and state Community Right-to-Know laws, the agency also responds to

public inquiries about toxic chemicals and provides a Website for this purpose.

## Improve Quality of Data Used for Environmental Decision Making

Sound environmental policy and regulatory decisions require accurate and timely data. To ensure the reliability and integrity of data Ecology uses, agency staff provide guidance and training on developing quality assurance project plans, review project proposals, and consult on sampling design requirements and interpretation of results. This quality assurance function is required by the Environmental Protection Agency (EPA) for entities (including Ecology) that receive funding for work involving environmental data. In addition, Ecology scientists, modelers, statisticians, chemists, and other specialists interpret technical data, review grantee monitoring plans, and supply information for policy decisions, to support agency mandates.

## Increase Compliance and Act on Environmental Threats from Hazardous Waste

The agency annually conducts formal compliance enforcement inspections at large and medium quantity generators and hazardous waste management facilities to ensure compliance with state and federal regulations. A credible, formal enforcement capability is essential to preserving the effectiveness of technical assistance and informal enforcement efforts. While staff undertake formal enforcement infrequently, repeated refusal or inability of a facility to correct violations and comply with the regulations will escalate to formal enforcement actions. When possible, a streamlined enforcement and settlement approach is used. This frees up inspectors to do more inspections instead of spending excess time with legal proceedings. The state also periodically amends the Dangerous Waste Regulations to keep our rules current with the federal program and maintain state authorization.

## **Increase Safe Hazardous Waste Management**

Ecology provides education and technical assistance to thousands of businesses on safe hazardous waste management. Safe management of hazardous waste protects the public and the environment, and enables the state to avoid significant clean-up costs. Although formal enforcement work is essential to maintaining compliance with hazardous waste regulations, training and technical assistance visits also can help bring facilities into regulatory compliance using fewer resources. Even small amounts of mismanaged toxic chemicals can create contaminated sites and pollute stormwater. To address environmental threats from small businesses, Ecology oversees performance contracts with 12 Puget Sound counties (in addition to Spokane County). These contracts provide for local source control specialists to conduct technical assistance visits to small businesses.

## Manage Underground Storage Tanks to Minimize Releases

Ecology currently regulates over 10,000 active tanks on over 3,600 different properties, including gas stations, industries, commercial properties, and governmental entities. We ensure tanks are installed, managed, and monitored according to federal standards and in a way that prevents releases into the environment. This is done through compliance inspections and providing technical assistance to tank owners and operators. Properly managing such tanks saves millions of dollars in cleanup costs and prevents contamination of limited drinking water and other groundwater resources.

#### **Manage Water Rights**

The agency allocates surface and ground water to meet the many needs for water. It does this by making decisions on applications for new water rights and by making decisions on applications for changes to existing water rights to reallocate water. Water right decisions require consideration of many factors, including determining whether water is available and whether existing rights would be impaired. The agency is responsible for managing an existing water rights portfolio of over 49,000 certificates, 3,000 permits and 166,000 claims.

# **Measure Air Pollution Levels and Emissions**

To make sound air quality management decisions, Ecology needs reliable information on the amount and sources of pollution and how it moves in the air. The agency uses three primary activities to collect this data: (1) Air quality monitoring (assessing trends; focused compliance; and assessing control strategies, health effects, and environmental damage); (2) emission inventory development (quantifying pollution released by sources of air pollution); and (3) meteorological and dispersion modeling forecasts (movement and concentration of air pollutants, carrying capacity of airsheds, interactions of pollutants, and point of maximum impact of pollution).

## Measure Contaminants in the Environment by Performing Laboratory Analyses

The Manchester Environmental Laboratory is a full-service environmental laboratory. The lab provides technical, analytical, and sampling support for chemistry and microbiology for multiple Ecology programs, and supports work conducted under the federal Clean Water Act, as well as the state Water Pollution Control, Puget Sound Water Quality Protection, and Model Toxics Control Acts.

## Monitor the Quality of State Waters and Measure Stream Flows Statewide

Ecology operates a statewide environmental monitoring network to assess the status of major waterbodies, identify threatened or impaired waters, and evaluate changes and trends in water quality over time. This network includes sampling stations in rivers, streams, and in-shore marine waters (Puget Sound and the major coastal estuaries). Ecology also measures stream flows in salmon-critical basins and key watersheds statewide, and posts the results in near real-time on our Web site.

## Improve Environmental Compliance at State's Largest Industrial Facilities

The Department of Ecology provides a single point of contact for petroleum refineries, pulp and paper mills, and aluminum smelters. Rather than having multiple inspectors work on the many environmental issues at a facility, one engineer provides coverage for all media. This means more balanced regulation for these major industries.

## **Prepare and Respond to Drought**

The agency provides services to reduce the impact of droughts and to prepare for future droughts and climate change. When droughts are declared, services include providing water through emergency transfers, water right changes, and temporary wells. The agency also provides drought related information and financial assistance and coordinates drought response efforts. Emerging information on climate change is also monitored for future water supply implications.

## Prepare for Aggressive Response to Oil and Hazardous Material Incidents

Large commercial vessels and oil handling facilities operators are required to maintain state-approved oil spill contingency plans to ensure they can rapidly and effectively respond to major oil spills. State planning standards ensure equipment and response personnel are—strategically staged throughout the state. This work is carried out through staff review and approval of contingency plans to ensure plan holders and spill response—contractors maintain readiness. Ecology also conducts scheduled and unannounced drills, partners with other agencies to maintain a regional contingency plan that guides how spills are—managed in the Northwest, and develops geographic response plans in consultation with other natural resource experts and communities.

## Prevent Hazardous Waste Pollution Through Permitting, Closure, and Corrective Action

Facilities that treat, store, and/or dispose of dangerous wastes are required to obtain a permit to ensure that their design, construction, maintenance, and operating procedures protect public health and the environment. Washington currently has 14 active facilities that are either in "interim status" or have a final permit. When business needs or requirement change, Ecology works with facilities to modify their permits. When these facilities close, Ecology ensures they have required closure plans in place to effectively deal with the end of their waste management activities. Environmental contamination found at any time before closure requires a corrective action clean-up plan. The agency is currently working on 22 high-priority corrective action clean-up sites. Ecology also ensures that proper financial assurance requirements are in place at all used oil processors and recyclers and facilities treating, storing, or disposing of dangerous wastes.

## **Prevent Point Source Water Pollution**

Ecology protects Washington's water by regulating point source discharges of pollutants to surface and ground waters. This is done with a wastewater permit program for sewage treatment plants and an industrial discharge program for other industries. A permit is a rigorous set of limits, monitoring requirements, or management practices, usually specific to a discharge, designed to ensure a facility can meet treatment standards and water quality limits. The permit is followed by regular inspections and site visits. Technical assistance and follow-up on permit violations also are provided through various means.

# Prevent Oil Spills from Vessels and Oil Handling Facilities

Ecology and the regulated community are fully prepared to promptly respond to oil spills, and damage from spills are minimized. Compliance with the industry sponsored Neah Bay response tug is documented in approved vessel contingency plans. Four Geographic Response Plan chapters are updated. The ongoing maintenance of response equipment is documented by industry and records verified by Ecology. Ecology targets oil spill related outreach efforts to local governments in coastal communities.

## Prevent Unhealthy Air and Violations of Air Quality Standards

Federal law establishes minimum air standards for six air pollutants known as criteria pollutants. Violations of those health-based standards trigger costly regulatory actions for state and local governments, businesses and consumers, resulting in economic constraints, and creating potential for severe financial sanctions against the state if problem areas are not cleaned up in a timely way. To ensure federal standards are met and people have healthier air to breathe, Ecology continuously measures air pollution levels and trends, develops and implements area specific cleanup plans, and designs and implements strategies to prevent violations. Recent compelling research shows the current National Ambient Air Quality Standards for some criteria pollutants do not protect human health, and these standards are under federal review. In light of this new research, Ecology is adjusting its focus to assure the air in Washington is both safe to breathe and meets federal standards. The agency will work to reduce ambient air pollutant concentrations to levels that ensure air in Washington communities is healthy to breathe, clean up areas that violate standards as quickly as possible, and prevent future violations of National Ambient Air Quality Standards.

Ecology issues permits and conducts inspections of new and existing industrial and commercial facilities that emit significant levels of air pollution. Permit and inspection programs are mandated either by federal or state clean air laws and are designed to be self supporting through fees to the degree allowed under law. Ecology provides technical assistance, permit application and processing guidance, interpretation of rules, pre application assistance, and permit review. Permits are conditioned and approved to ensure all federal and state laws are met, and that public health, air quality, and the environment are protected. Sources are inspected to ensure permit conditions are met and that on-going operations do not jeopardize public health. Ecology develops and modifies industrial source regulations to incorporate federal and state law changes, simplify and streamline permit requirements, and ensure public health protection. Ecology conducts compliance inspections, resolves complaints, and develops technical and policy direction on emerging industrial permit issues.

## **Promote Compliance with Water Laws**

The agency helps ensure that water users comply with the state's water laws so that other legal water users are not impaired; water use remains sustainable over the long term; and the environment is protected for the benefit of people and nature. Activities include water metering and reporting 80 percent of water use in 16 fish critical basins, along with education, technical assistance, and strategic enforcement in egregious cases.

## Protect and Manage Shorelines in Partnership with Local Governments

The Shoreline Management Act establishes a cooperative program between local and state governments, in which local governments develop and administer local Shoreline Master Programs, and the Department of Ecology provides support and oversight. The agency is involved in shoreline management in four primary ways: developing guidelines for local shoreline programs; providing technical assistance to local governments and applicants on shoreline planning and permitting activities; reviewing and approving amendments to local shoreline master programs; and reviewing permits to ensure resource protection and implementation of the law. The agency works with local governments on permit compliance by responding to public inquiries and complaints, making field visits, providing compliance-related technical assistance, and issuing notices of correction, orders, and penalties. Properly managed shorelines provide habitat for fish and wildlife, minimize flooding and property damage, and provide land-use certainty to local landowners.

## Protect Water Quality by Reviewing and Conditioning Construction Projects

The Department of Ecology issues water quality certifications and Coastal Zone Management Act consistency determinations for water-related construction projects. Staff provide early review on projects whenever possible (e.g., through State Environmental Policy Act review and pre-application meetings) and provide project guidance and technical assistance through phone calls, e-mails, site visits, and workshops. Projects are approved, denied, or conditioned to protect water quality, sediment quality, and fish and shellfish habitat. This activity allows the state to actively participate in federal permitting activities to ensure that state interests are adequately represented and considered.

#### Protect, Restore, and Manage Wetlands

The Department of Ecology has the lead responsibility in implementing the state Water Pollution Control Act, which requires the protection of wetlands. The agency provides technical assistance to local governments, helping them implement requirements in the Shoreline Management and Growth Management acts. Staff also provide technical assistance to non-government entities on wetlands conservation and stewardship programs. The agency provides leadership on wetlands issues, coordinating statewide policy issues, and developing new approaches for managing and restoring wetlands. Properly functioning wetlands protect water quality, reduce flooding, provide aquifer recharge for drinking water and other uses, and provide critical habitat for fish and wildlife.

# Provide Technical and Financial Assistance to Local Governments to Reduce Flood Hazards

The Department of Ecology administers the Flood Control Assistance Account Program, providing grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management planning. Staff review and approve local Comprehensive Flood Hazard Management Plans and inspect construction of flood damage reduction projects. The Department of Ecology is also the state's coordinating agency for the National Flood Insurance Program (NFIP) and receives an annual Community Assistance Program grant to provide technical assistance and support to 286 communities enrolled in the NFIP. In this role, staff make regularly scheduled technical assistance visits to communities, assess local regulatory programs for compliance with state and federal requirements, and provide workshops and other outreach on flood hazard recognition and reduction. Proper flood control planning and projects protect both private and public property, as well as natural resources and fish and wildlife habitat.

# Provide Technical Assistance on State Environmental Policy Act (SEPA) Review

SEPA was adopted in 1971 to ensure that state and local decision makers consider the environmental impacts of their actions. The SEPA law provides an opportunity for local citizen involvement in the environmental review process and provides developers an opportunity to identify mitigation opportunities that facilitate overall project approval and minimize development costs. The agency provides training and assistance to local governments and the public, and manages the SEPA register.

## Provide Technical Training, Education, and Research through Padilla Bay Estuarine Reserve

The Padilla Bay National Estuarine Research Reserve is one of 25 national reserves established to protect estuaries for research and education. The Padilla Bay Reserve in Skagit County conducts a broad array of public education programs, technical and professional training, coastal restoration, and scientific research and monitoring. The reserve, managed in partnership with the National Oceanic and Atmospheric Administration (NOAA), includes over 11,000 acres of tidelands and uplands; the Breazeale Interpretive Center; a research laboratory; residential quarters; trails; and support facilities. The reserve also provides funding and technical support to local Marine Resource Committees as part of the Northwest Straits Initiative, and administers the Northwest Straits Marine Commission as established by Senator Murray in 1998.

## **Provide Water Quality Financial Assistance**

Ecology provides grants, low-interest loans, and technical assistance to local governments, state agencies, and tribes to enable them to build, upgrade, repair, or replace facilities to improve and protect water quality. This includes meeting the state's obligation to manage the Water Pollution Control Revolving Fund in perpetuity. Ecology also funds nonpoint-source control projects such as watershed planning, stormwater management, freshwater aquatic weed management, education, and agricultural best management practices. Grants are targeted to nonpoint-source problems and communities where needed wastewater facilities projects would be a financial hardship for taxpayers. Local governments use loans for both point and nonpoint-source water pollution prevention and correction projects. Ecology coordinates grant and loan assistance with other state and federal funding agencies.

#### **Provide Water Resources Data and Information**

The collection, management, and sharing of data and information is critical to modern water management. It is essential to local watershed groups, conservancy boards, businesses, local governments, nonprofit groups, the Legislature, other agencies, and the media. It supports daily agency operations, including making water allocation decisions; setting and achieving stream flows; identifying the location and characteristics of wells, dams, and water diversions; supporting compliance actions; metering; tracking progress; communicating with constituents; and serving other water resource functions.

#### Reduce Air Pollution from Industrial and Commercial Sources

Ecology issues permits and conducts inspections of new and existing industrial and commercial facilities that emit significant levels of air pollution. Permit and inspection programs are mandated either by federal or state clean air laws and are designed to be self supporting through fees to the degree allowed under law. Ecology provides technical assistance, permit application and processing guidance, interpretation of rules, pre application assistance, and permit review. Permits are conditioned and approved to ensure all federal and state laws are met, and that public health, air quality, and the environment are protected. Sources are inspected to ensure permit conditions are met and that on-going operations do not jeopardize public health. Ecology develops and modifies industrial source regulations to incorporate federal and state law changes, simplify and streamline permit requirements, and ensure public health protection. Ecology conducts compliance inspections, resolves complaints, and develops technical and policy direction on emerging industrial permit issues.

#### Reduce Health and Environmental Threats from Motor Vehicle Emissions

Cars, trucks, construction equipment, locomotives, and marine vessels are responsible for over 60 percent of Washington's air pollution. These emissions adversely affect public health, substantially increase health care costs, and increase cancer and mortality rates. Without significant emission reductions, Ecology cannot ensure healthy air to breathe, future attainment of federal air quality standards, avoid multi million dollar control costs to businesses and citizens, or reduce or prevent harmful health effects. To protect public health and the environment from motor vehicle pollution, Ecology implements: Washington's Clean Car standards; the vehicle emission check program of nearly two million cars and trucks; promotes transportation alternatives and cleaner motor vehicles and fuels through voluntary, regulatory, and incentive programs; and retrofits school buses and other diesel engines with better emission controls and idle reduction technologies.

#### Reduce Health and Environmental Threats from Smoke

Nagging regional smoke pollution plagues many areas in Washington and affects public health and quality of life. The two leading sources of smoke in Washington communities are outdoor burning and wood-burning for residential heat. To address smoke from outdoor burning, Ecology issues conditioned permits for agricultural, land clearing, fire training, and other outdoor burning, where required by law. The agency also produces daily burn forecasts; responds to and resolves complaints related to smoke; provides technical assistance to manage and prevent outdoor burning impacts and, through technical assistance, research, and demonstration projects, promotes development and use of practical alternatives to burning. To address smoke from residential wood heating Ecology: coordinates burn curtailments; conducts wood stove change out programs; sets strict emission limits for new stoves and promotes development of clean burning technologies; and coordinates with the Environmental Protection Agency (EPA) on standards for residential home heating appliances. Ecology will assist communities, local health organizations and fire suppression agencies with health impact messaging and recommendations during large-scale wildfire events

## **Reduce Nonpoint-Source Water Pollution**

Nonpoint-source pollution (polluted runoff) is the leading cause of water pollution and poses a major health and economic threat. Types of nonpoint pollution include fecal coliform bacteria, elevated water temperature, pesticides, sediments, and nutrients. Sources of pollution include agriculture, forestry, urban and rural runoff, recreation, hydrologic modification, and loss of aquatic ecosystems. Ecology addresses these problems through raising awareness; encouraging community action; providing funding; and supporting local decision makers. The agency also coordinates with other stakeholders through the Washington State Nonpoint Workgroup, the Forest Practices Technical Assistance group, and the Agricultural Technical Assistance group.

## Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment

Persistent, bioaccumulative toxins (PBTs) are a particular group of chemicals that can significantly affect the health of humans, fish, and wildlife. The agency developed, and the Legislature funded in the 2001 03 Biennium, implementation of a long term strategy designed to reduce PBTs in Washington's environment over the coming years. This strategy coordinates agency wide efforts, engage other key organizations and interest groups, and provide for public education and information on reducing PBTs in the environment.

The Legislature has enacted bans for certain products containing mercury, PBDEs, and lead. Ecology has implemented programs to reduce uses of mercury and lead and we continue to support programs to reduce releases of PAHs. Ecology continues to support the Department of Health and local health departments in eliminating sources of lead in homes. Ecology is currently developing a chemical action plan for PCBs. Following the PCB plan, Ecology will work with stakeholders to update the rule, if needed, and develop a schedule for subsequent chemical action.

#### **Reduce Risk from Toxic Air Pollutants**

Ecology has identified 16 high risk toxic air pollutants that are prevalent in Washington. To significantly reduce potential risk to the public, Ecology conducts annual air toxics emission inventories; operates air toxics monitoring sites; limits toxic emissions through permit conditions for commercial facilities, combustion processes and outdoor burning; and implements programs to reduce emissions from diesel engines and indoor wood heating devices.

## Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical Assistanc

The state Hazardous Waste Reduction Act calls for the reduction of hazardous waste generation and the use of toxic substances and requires certain businesses to prepare plans for voluntary reduction. Staff provide on-site assistance through innovative programs designed to reduce the use of source and waste generation reduction, including more than 275 technical assistance visits per year. In addition, the agency focuses on improvements in industries that have the highest rate of waste generation and

non-compliance to help them achieve energy savings, water conservation, and reduced hazardous waste production. Reducing the use of toxic chemicals in commerce reduces the generation of hazardous waste, minimizes disposal costs, reduces the need for clean-up, minimizes public exposure, and saves businesses money.

## **Regulate Well Construction**

The agency protects consumers, well drillers, and the environment by licensing and regulating well drillers, investigating complaints, approving variances from construction standards, and providing continuing education to well drillers. The work is accomplished in partnership with delegated counties. It delivers technical assistance to homeowners, well drillers, tribes, and local governments.

## Rapidly Respond to and Clean Up Oil and Hazardous Material Spills

Oil and hazardous materials spills present a danger to human health and the environment. Ecology is responsible for rapidly responding to and overseeing the cleanup of oil spills, hazardous material incidents, methamphetamine drug labs, and helping other "first response" organizations during Weapons of Mass Destruction (WMD) incidents. This work is done through the following core activities 24-hours-a-day, statewide: Response capability from five field offices; coordination with local, state and federal law enforcement agencies for methamphetamine drug lab cleanup; compliance actions for violations related to oil and hazardous material spills.

## Restore Public Natural Resources Damaged by Oil Spills

Ecology leads a multi-agency natural resource trustee committee to assess damages to publicly-owned natural resources from oil spills. This work is done through the following core activities: Assessing the monetary value of damaged natural resources; seeking fair compensation from the responsible parties; chairing the Coastal Protection Committee to ensure the money collected is used for projects to restore the environmental damage; and conducting site follow-up visits to ensure accountability of project success after the project is completed.

## Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps

The Washington Conservation Corps (WCC) was established in 1983 to conserve, rehabilitate, and enhance the state's natural and environmental resources, while providing educational opportunities and meaningful work experiences for young adults (ages 18-25). The WCC creates partnerships with federal, state, and local agencies, private entities, and nonprofit groups to complete a variety of conservation-related projects. These include stream and riparian restoration, wetlands restoration and enhancement, soil stabilization, and other forest restoration activities, fencing, and trail work. The WCC also provides emergency response and hazard mitigation services to local communities.

## Services to Site Owners that Volunteer to Clean Up their Contaminated Sites

Ecology provides services to site owners or operators who initiate clean up of their contaminated sites. Voluntary cleanups can be done in a variety of ways: Completely independent of the agency; independent with some agency assistance or review; or with agency oversight under a signed legal agreement (an agreed order or consent decree). They may be done through consultations, prepayment agreements, prospective purchaser agreements, and brownfields redevelopment. The voluntary cleanup program minimizes the need for public funding used for such cleanup and promotes local economic development through new industries and other beneficial uses of cleaned properties.

## **Provide Streamlined Project Permitting for Transportation Projects**

The Department of Ecology contracts with the Washington State Department of Transportation (WSDOT) to provide dedicated personnel focused on improving and implementing the permitting and regulatory process for state transportation projects. To address traffic congestion and allow businesses to efficiently transport products in Washington, the Legislature and Governor have approved significant spending on transportation projects with the expectation of expedient project delivery. Interagency agreements with WSDOT allow the agency to permit and mitigate transportation projects through multi-agency transportation permitting teams, multi-agency programmatic approvals, watershed-based mitigation alternatives, and the assignment of dedicated organizational infrastructure at the Department of Ecology. Currently, this activity is wholly funded by interagency agreements with the Washington State Department of Transportation. Agreements expected to total \$1,655,000 for the biennium fund 8.43 FTEs. Additional agreements may be signed that would increase both FTEs and funding.

## Provide Regulatory Assistance for Significant Projects and Small Businesses

The Department of Ecology contracts with the Washington State Office of Regulatory Assistance (ORA) to provide dedicated permitting and environmental assistance services. This includes a headquarters-based One-Stop Service Center for walk-in, call-in, and 24/7 Web-based customers needing information, contacts, and assistance concerning local, state, and federal permits and approvals. It also includes regionalized Case Managers for more complex, complicated, and lengthy projects needing dedicated project management and process facilitation assistance. Currently, this activity is partly funded by an interagency agreement with the Office of Financial Management (OFM), and by funds from the agency's Administration Program. Three FTEs are funded by an agreement with OFM that is expected to total \$796,000 for the biennium. Three additional FTEs are funded by the Administration Program; the cost of these FTEs is approximately \$180,000 for the biennium.

## **Support Water Use Efficiency**

The agency provides agricultural, commercial/industrial, and nonprofit water users with services that deliver water savings. These include information, planning, and technical, engineering, and financial assistance. Support also is provided for water reuse projects and to the Department of Health for municipal water conservation.

## **Climate Change Mitigation and Adaptation**

State law sets limits on emissions of greenhouse gases and establishes a portfolio of policies to reduce energy use, and build a clean energy economy. It also lays out requirements to prepare for and respond to climate changes that are already underway and unavoidable. To better understand the volume and sources of greenhouse gas emissions in the state, Ecology conducts a biennial emissions inventory and will implement a program for mandatory greenhouse gas reporting. To help the state achieve its greenhouse gas targets, Ecology will continue to provide technical and analytical support to state decision makers, and will also continue its efforts to monitor and influence federal initiatives that reduce greenhouse gas emissions. Ecology will continue to assist local governments and state agencies identify and report their greenhouse gas emissions and develop strategies to reduce those emissions. To help citizens, business, and local governments cope with existing and projected climate changes Ecology has worked in concert with other designated agencies to develop an integrated climate change response strategy. Ecology will continue its efforts to make information about climate change impacts readily accessible to decision makers in the public and private sectors, as well as the public.

#### Manage Solid Waste Safely

As the state moves toward reducing the amount and toxicity of waste, there are still wastes that need to be managed properly. Improper disposal practices of the past have resulted in today's cleanup sites. Ecology negotiates and implements cleanup orders under the Model Toxics Control Act (MTCA) at solid waste facilities. Local health jurisdictions are responsible for facility permitting and compliance. Ecology provides technical assistance, engineering and hydrogeology expertise, and oversight to local health departments to ensure that solid waste handling and disposal facilities are in compliance with environmental requirements.

## Reduce Toxic Chemicals in Products and Promote Safer Alternatives

Toxic chemicals in some consumer products have been found to be a source of pollution in our environment and potentially harmful to humans. Reducing toxic chemicals in products over time will lower the risks to people and the environment. To make significant progress toward achieving this goal requires several strategies: identifying chemicals of concern in consumer products and promoting safer alternatives to identified chemicals; promoting green chemistry; and promoting environmentally preferred purchasing.

## Support Watershed-Based Water Supply and Resource Stewardship

Ecology helps local organizations (including local governments, tribes, watershed groups, and interested stakeholders) address water problems for the people, farms and fish in their watersheds by providing technical and financial assistance and scientific expertise.

Efforts in support of water supply solutions are focused on ensuring adequate water availability in water-short areas of the state.

Targeted technical and financial assistance under the Watershed Planning act is provided for plan implementation and updates in areas where community/watershed-based groups are active partners in identifying in-stream and out-of-stream water availability solutions and projects.

As appropriate, locally-approved plans and water-supply solutions are incorporated into Ecology rules, policies or agreements.